

ELECTRONIC COMPONENTS WITH PLURALITY OF CONTOURED MICROELECTRONIC SPRING CONTACTS

ABSTRACT OF THE DISCLOSURE

5 An electronic component is disclosed, having a plurality of microelectronic
spring contacts mounted to a planar face of the component. Each of the microelectronic
spring contacts has a contoured beam, which may be formed of an integral layer of
resilient material deposited over a contoured sacrificial substrate, and comprises a base
mounted to the planar face of the component, a beam connected to the base at a first
10 end of the beam, and a tip positioned at a free end of the beam opposite to the base.
The beam has an unsupported span between its free end and its base. The
microelectronic spring contacts are advantageously formed by depositing a resilient
material over a molded, sacrificial substrate. The spring contacts may be provided with
various innovative contoured shapes. In various embodiments of the invention, the
15 electronic component comprises a semiconductor die, a semiconductor wafer, a LGA
socket, an interposer, or a test head assembly.